



# Potential for climate action

Examples of how to mainstream  
climate action and the potential  
for doing so

## ESF

European Social Fund  
2014-2020

## Introduction

The European Social Fund (ESF) contributes to the EU's priorities of strengthening economic, social and territorial cohesion. Its goal is to support Member States in reaching the Europe 2020 targets of generating smart, sustainable and inclusive growth. In order to contribute to sustainable growth, the ESF must support the labour force transition towards low-carbon skills, jobs and working methods, with a view to safeguarding, transforming and creating jobs.

The ESF focuses on the following Thematic Objectives (TOs)<sup>1</sup>:

- Promoting sustainable and quality employment and supporting labour mobility (TO8),
- Promoting social inclusion, combating poverty and any discrimination (TO9),
- Investing in education, training and vocational training for skills and lifelong learning (TO10),
- Enhancing institutional capacity of public authorities and stakeholders and efficient public administration (TO11).

All these TOs have the potential to contribute to climate action, i.e. to aid climate change mitigation and adaptation. The investment priorities under each of the ESF TOs could also support action under other European Structural and Investment Funds (ESIF) under other TOs, such as:

- Strengthening research, technological development and innovation (TO1);
- Enhancing the competitiveness of small and medium-sized enterprises (SMEs), of the agricultural sector (for the EAFRD) and of the fishery and aquaculture sector (for the EMFF) (TO3);
- Supporting the shift towards a low-carbon economy in all sectors (TO4);
- Promoting climate change adaptation, risk prevention and management (TO5).

The ESF has an important role to play to support several aspects of climate action:

1. Supporting the labour force by enhancing knowledge and skills and matching skills to develop, produce, use and apply new efficient and low-carbon technologies in a broad range of sectors.
2. Offering support to the labour force in order to alleviate any negative impacts on employment as a result of shifting to a low-carbon and climate-resilient economy, i.e. jobs cuts in energy-intensive industries.

The transition to a low-carbon and climate-resilient economy also creates opportunities for promoting social inclusion.

Overall, the greatest potential for climate action is under the TOs that address employment and labour mobility (TO8), and education, skills and lifelong learning (TO10). The objective to address institutional capacity needs (TO11) also has significant potential.

Action under the ESF could be independent (e.g. awareness-raising about climate-friendly work practices) or they could build on synergies with other ESIF funding e.g. using the ESF to train the labour force working with renewable energy technologies funded under the European Regional Development Fund (ERDF).

## Sectors and the demand for skills

The sectors that offer the greatest potential for green growth and jobs are not identical in all regions and countries. The level of potential depends, for example on the energy-efficiency of existing buildings,

the specific opportunities a particular region has in terms of renewable energy and industry structure (e.g. car producing countries and regions could benefit from upgrading skills and competences regarding low-emitting vehicles).

Examples of green growth sectors include:

- Clean energy, including renewable energy e.g. wind, solar, geothermal, biomass/biogas, and smart grids
- Construction and the built environment e.g. insulation, eco-construction, new heating and cooling technologies, energy management of buildings
- Manufacturing e.g. low-carbon vehicles, energy-saving products, Information and Communications Technology (ICT) solutions
- Services e.g. increasing the level of carbon literacy of workers, advice and low cost installations for energy savings and renewable energy
- Transport e.g. low-carbon infrastructure and vehicles
- Waste and water management
- Recovery of raw materials and recycling

New and alternative job opportunities and new skills are increasingly needed in the construction sector and the built environment. The construction of low energy houses has growth potential, stimulated by the Energy Performance of Buildings Directive (2010/31/EU), setting minimum requirements to energy performance of new and existing buildings and requiring that by 2021 all new houses will have to be nearly zero energy buildings. For example, passive houses require techniques such as airtight building envelopes, the installation of triple glazing, and heat recovery ventilation. Another example is heat pump technologies that can provide both heating and cooling services (which may be needed due to an increasing number of heat waves) in a highly efficient way, and solar thermal installations of hot water. These examples show that even in a 'traditional sector' such as the construction sector, new skills, techniques and equipment will increasingly be used, and inevitably replace older and more inefficient techniques.

A similar transition effect on skills and jobs can be seen in the water management sector. In some regions, water scarcity caused by climate change will trigger changes in water use practices, e.g. water-efficient irrigation methods in agriculture, such as drip irrigation. This may generate some jobs, but other operational jobs may be lost downstream due to greater efficiency in operation.

Instruments to support the labour force shifting to a low-carbon economy include 1) providing the basis for better understanding of tomorrow's demand for skills, 2) offering training and education, 3) providing mechanisms to match supply to the demand for green skills, and 4) improving tools and competences of job counselors.

## Examples of how climate issues were mainstreamed in the ESF under the 2007-2013 financial framework

**Clear about carbon in the United Kingdom** The aim of this project is to develop, test and deliver innovative approaches to increasing the level of carbon literacy in the workforce. It seeks to do so by capacity building, skills development and knowledge sharing. Actions included work to transform the purchasing policies of the largest public and voluntary-sector organisations to take into account a low-carbon future.

**Energy-savings check in Germany** This project provides training to more than 700 long-term unemployed persons and consulted low-income households on the subject of energy savings and water consumption.

<sup>1</sup> Cf. ESF Regulation (EU) No 1304/2013 published in Official Journal, OJ 347 20.12.2013

**Training for the unemployed and employment in green professions in Greece** This project provides vocational training in a wealth of green professions. It targets 7.500 unemployed persons and the training combines both theory and practice. Collaborating enterprises are obligated to recruit at least 30 % of those that have received practical training with them for a period of at least three months.

**Eco-Advantage project in the UK** This partnership between three local councils and a training institute helped to develop the climate action-related skills needed in the future. The project develops pilot schemes and mainstreams innovative eco-advantage short training programmes targeting lower-skilled front-line staff and the unemployed. It gives them a practical understanding of the issues surrounding climate change, thereby providing the lower level 'green skills' a person can bring to the workplace.

## Further reading

European Commission (2012): Commission staff working document, *Exploiting the employment potential of green growth*.

European Commission (2013) *Promoting Green Jobs through the Crisis: a handbook of best practices in Europe*.

Department for Work and Pensions (2011) European Social Fund, *Evaluation of sustainable development and green jobs*, England.

OECD (2012) *The jobs potential of a shift towards a low-carbon economy*.

Eurofound (2012) *Greening of industries in the EU: Anticipating and managing the effects on quantity and quality of jobs*.

## Generic examples of how the ESF can address climate mitigation and adaptation

| TO Type of ESF intervention |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8                           | <b>Advisory services to SMEs</b> on improving their energy-efficiency and on the new business opportunities offered by the shift to a low-carbon and climate-resilient economy. Networks can be created inviting investors, entrepreneurs and SMEs to join, thereby providing a common platform to exchange good practices and offer counselling and training to members. The ESF could also support awareness raising campaigns and facilitate contact with potential investors.                                                                                             |
|                             | <b>Training of SMEs</b> in applying climate-friendly technologies and improving the climate resilience of their business, including their premises.                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                             | <b>Training in the operation of power generation facilities</b> using energy from renewable sources, or micro-generation.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                             | <b>Training in the use of green procurement</b> to meet the requirements of energy efficiency and renewable energy use, to promote climate-friendly products and to integrate climate resilience considerations.                                                                                                                                                                                                                                                                                                                                                              |
|                             | Building up the competences, tools and skills of <b>job counselling and career guidance professionals/advisors</b> on the prospects offered by climate mitigation and adaptation. Examples include forming public-private partnerships for human resource development, and creating networks of skilled advisors.                                                                                                                                                                                                                                                             |
|                             | <b>Community-led strategies</b> to incorporate climate action as a source of job creation and to reduce climate change vulnerability, notably on the impacts from extreme weather events, e.g. improved flood control.                                                                                                                                                                                                                                                                                                                                                        |
| 9                           | Targeted <b>awareness campaigns</b> on low-carbon developments and how owners can increase the value of their property by making it more energy efficient.                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                             | Support to provide <b>apprenticeships</b> for green jobs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                             | Support to <b>social enterprises</b> in the area of waste management, recycling and reuse (urban mining), which can be labour intensive, and for activities that generate very low profit margins.                                                                                                                                                                                                                                                                                                                                                                            |
| 10                          | <b>Training for young people, the self-employed and entrepreneurs</b> in emerging green sectors (e.g. energy efficient equipment, low-emitting vehicles, renewable energy and low-carbon ICT solutions).                                                                                                                                                                                                                                                                                                                                                                      |
|                             | <b>Adapting vocational and educational training</b> as well as <b>tertiary education</b> to reflect labour market demand for skills in green jobs, taking into consideration tools and methods for energy efficiency and climate resilience in buildings.                                                                                                                                                                                                                                                                                                                     |
|                             | <b>Training of highly skilled workers</b> (e.g. architects and urban planners) in designing high energy efficient and climate resilient buildings and planning and designing low-carbon and climate resilient urban environments and sustainable urban mobility.                                                                                                                                                                                                                                                                                                              |
|                             | Upgrading <b>curricula in education</b> to reflect the needs and opportunities of shifting to a low-carbon and climate resilient economy. Changes to the curricula can be made to integrate sector-specific competences. This can be done at all educational levels, and could be designed in consultation with the sectors concerned to ensure that changes reflect current or perceived needs. An example is the potential need for more ICT skills and knowledge in the automotive industry, and the need for competences to manage zero-emissions building constructions. |
|                             | <b>Training for medium-skilled jobs</b> (e.g. for installation works of energy efficient and climate resilient buildings and for installing solar panels and sun-powered heating plants).                                                                                                                                                                                                                                                                                                                                                                                     |
|                             | <b>Training for low-skilled jobs</b> , for example in low-carbon refurbishment of buildings, waste management and recycling to minimise waste disposal (urban mining), reducing greenhouse gas (GHG) emissions at landfills, and in operating climate resilient infrastructure. Another example is the training of low-skilled and long-term unemployed people in energy saving activities, enabling them to provide advice to households on energy savings.                                                                                                                  |
| 11                          | <b>Capacity building for labour market institutions and other stakeholders</b> in order to provide better advisory services to workers in the area of green growth and taking action on climate change mitigation and adaptation.                                                                                                                                                                                                                                                                                                                                             |
|                             | <b>Capacity building for social partners</b> to support workers in the low-carbon transition. For example, this could include joint methods and tools for identifying target growth sectors, skills shortages and methods to upgrade the necessary skills.                                                                                                                                                                                                                                                                                                                    |
|                             | <b>Capacity enhancement</b> by training civil servants to frame legislation and implement frameworks with a view to ensuring consistent and horizontally integrated climate policies and strategies at all levels of public administration.                                                                                                                                                                                                                                                                                                                                   |

## Specific examples of ESF climate action

| Theme                                                                        | Possible substance of the action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Promotion of green jobs in a restructuring economy</b>                    | <p>The impact of climate change will trigger new needs on the job market. They could have a negative effect on production factors (e.g. fish stocks or certain tourist resorts) upon which the local economy depends, which could mean reallocating labour. But climate change can also create new job opportunities (e.g. the use of climate-friendly technologies and energy efficiency in buildings). Hence, employment structures need to adapt to the impacts of climate change.</p> <p><i>Example: The initiative <b>Going green in Spain</b> promotes employment and protects the environment. It improves workers' environmental skills and qualifications through training, fosters the growth of new green SMEs and encourages the environmental sustainability of economic activities.</i></p>                                                                                                                                                                            |
| <b>Skills and competences needed to follow the renewable energy strategy</b> | <p>Local or regional strategies to promote mitigation can provide several positive outcomes. They can reduce the carbon footprint of the community or region, reduce energy costs, and they can help to establish or strengthen the market position of local green businesses. Therefore they contribute to mitigation directly, and indirectly through the skills and knowledge they can provide other regions. They can also help to attract new enterprises to the region, and help the labour force build up new low-carbon skills and competences.</p> <p><i>Example: The initiative on <b>renewable energy in Burgenland, Austria</b> aims to reach complete energy self-sufficiency by 2050. The strategy involves many types of interventions and strands, including solar energy, wind energy and biomass. VET and continuous training opportunities are important aspects of the strategy as they help identify new professions and develop curricula accordingly.</i></p> |
| <b>Bringing low-skilled unemployed people into employment</b>                | <p>Low-skilled unemployed people are an untapped resource that can be activated to support climate mitigation and adaptation action via social enterprises. For example, they can help increase the re-use of waste materials. Social enterprises can become involved in the green sector to activate these untapped resources.</p> <p><i>The <b>'energy scanners' project, Belgium</b> trains low-skilled, long-term unemployed people in different energy saving activities. They become energy scanners, who provide households with a free installation of low-cost water and energy-saving devices plus advice on how to save energy. Insulation and recycling are also part of the initiative. Training courses are offered and the trained workers are then employed by enterprises, which in turn collaborate with external partners.</i></p>                                                                                                                                |
| <b>Devising curricula for green skills in vocational training</b>            | <p>Mainstreaming climate change into curricula at different educational levels and professions can generate a higher level of awareness and knowledge that can be put in place to promote mitigation and adaptation within and across sectors.</p> <p><i>Example: <b>DEVIN-VERT</b> in France mainstreams the training paths of the National Association for Adult Vocational Training. 150 training paths will be reviewed and sustainable development will be integrated into all of them. In addition, 20 new training paths have been developed to match skills requirements. Other educational initiatives in France have included an increase in the training of civil servants in energy efficiency, and reviews and revisions of specific educational paths.</i></p>                                                                                                                                                                                                         |
| <b>Devising curricula for green skills in education</b>                      | <p>Climate change calls for new or revised curricula to provide training in suitable professional competences.</p> <p><i>A new <b>channel of non-university courses</b> covers technological areas of national priority in the EU framework such as energy efficiency and sustainable mobility. Out of 62 courses offered today, 23 link to renewable energy sources, energy efficiency, sustainable mobility or make reference to green skills.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Training to acquire new skills</b>                                        | <p>Certain skills will become obsolete while others will be in demand due to structural changes in the labour market and demands for a greener economy. Furthermore, the skills required for existing jobs will have a stronger green element.</p> <p><i>Example: The professional training and coaching programme <b>Corporate Energy Efficiency Programme</b> helps SMEs to acquire the in-house skills and experience needed to permanently reduce energy consumption and costs. This training and coaching programme targets commercial and technical staff, engineers and facility managers; and in general any staff that needs to acquire skills in energy efficiency.</i></p>                                                                                                                                                                                                                                                                                                |
| <b>Partnerships for green growth and jobs</b>                                | <p>Constructive collaboration among social partners and other stakeholders is key in order to properly identify skills needs and gaps, and the best ways to close those gaps.</p> <p><i>Example: The <b>Partnership for development and promotion of green jobs</b> aims to create the right conditions for green sectors in the Province of Podlaskie. The project includes 1) learning about best practices through transnational partnerships (UK, ES), 2) creating regional public-private partnerships for human resource development, and 3) improving skills and increasing awareness of green jobs. An important aspect of the project is the strengthened partnership between government, NGOs and trade unions to address problems emerging from the lack of cooperation and coordination of actions (DE).</i></p>                                                                                                                                                         |



## Background information

### Why do we need to take climate action?

Tackling climate change is one of the great challenges facing the EU and its global partners.

The need for urgent action is clearly reflected in the Europe 2020 Strategy and the EU's ambitious 20/20/20 targets for climate change mitigation, i.e. to cut greenhouse gas emissions by 20 % (30 % if the conditions are right); reduce energy consumption by 20 % through increased energy efficiency; and to meet 20 % of energy needs from renewable sources.

Climate change is already happening and its effects will become more severe in coming years. So we need to take action on mitigation, and we also need to act to protect people, buildings, infrastructure, businesses and ecosystems from the impacts. These adaptation measures, which will make us more resilient to the adverse impacts of climate change, will become increasingly important. Adaptation measures can be taken at national, regional and local levels. Adaptation measures include for example actions that can stimulate more efficient water use, and development and use of design standards that protect constructions against the impacts of future climate conditions and extreme weather events. Other examples include the building of flood defences, raising the levels of dykes, and replacing exposed power overhead lines with underground cables. It also includes measures to take advantage of possible opportunities arising from climate change. The aim of the EU's Strategy on adaptation to climate change is to help make Europe more climate-resilient and enhance its preparedness and capacity to respond to the impacts of climate change.

Building a low-carbon and climate resilient economy will enhance Europe's competitiveness, create new, greener jobs, improve energy security and bring health benefits to Europe's citizens by improving air quality.

### EU funding over the period 2014–2020

The EU budget has an important role to play in promoting climate action in all sectors of the European economy and in catalysing the investments needed to meet the climate targets and ensure climate resilience. Investment is needed in a wide range of technologies that improve energy efficiency, in renewable energy sources and related infrastructure, and in adaptation to climate change.

Based on a proposal put forward by the Commission, the European Council concluded on 7–8 February 2013 that 'Climate action objectives will represent at least 20 % of EU spending in the period 2014–2020 and therefore be reflected in the appropriate instruments to ensure that they contribute to strengthen energy security, building a low-carbon, resource efficient and climate resilient economy that will enhance Europe's competitiveness and create more and greener jobs'.

### European Structural and Investment Funds (ESIF)

ESIF include the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD), and the European Maritime and Fisheries Fund (EMFF).

The ultimate responsibility for implementing the EU budget lies with the European Commission, but the ESIF are implemented under 'shared management', with individual EU countries actually distributing the funds and managing expenditure. Checks and balances are in place to ensure the funds are managed properly and in accordance with the rules.

## Common Provisions Regulation (CPR)

The CPR sets out the means to achieve consistency with the economic policies of the EU and its Member States, coordination mechanisms among the ESI Funds and with other EU policies and instruments, horizontal principles and cross-cutting policy objectives. It lays down arrangements to address territorial challenges, suggests action with high European added value and sets out the principles and the priorities for action.

Each Member State will prepare a Partnership Agreement, in cooperation with its partners and in dialogue with the Commission. In preparing the Partnership Agreement, each Member State translates the elements set out in the CPR into the national context and sets firm commitments to achieve the EU's objectives through the programming of the ESIF.

ESIF will be implemented through programmes in accordance with the Partnership Agreement. Each programme will cover the period 2014–2020. It will set out a strategy explaining how the programme will address the national and/or regional needs and contribute to the EU's strategy for smart, sustainable and inclusive growth, in line with the applicable regulations and the Partnership Agreement.

The CPR defines eleven Thematic Objectives (TOs), which will contribute to the implementation of the EU's strategy for smart, sustainable and inclusive growth. The eleven TOs are:

1. Strengthening research, technological development and innovation
2. Enhancing access to, and use and quality of, ICT (information and communication technologies)
3. Enhancing the competitiveness of SMEs, of the agricultural sector (for the EAFRD) and of the fishery and aquaculture sector (for the EMFF)
4. Supporting the shift towards a low-carbon economy in all sectors
5. Promoting climate change adaptation, risk prevention and management
6. Preserving and protecting the environment and promoting resource efficiency
7. Promoting sustainable transport and removing bottlenecks in key network infrastructures
8. Promoting sustainable and quality employment and supporting labour mobility
9. Promoting social inclusion, combating poverty and any discrimination
10. Investing in education, training and vocational training for skills and lifelong learning
11. Enhancing institutional capacity of public authorities and stakeholders and efficient public administration

The fund-specific regulations define the corresponding investment priorities for each TO.

TO4 and TO5 are dedicated to climate change mitigation and adaptation. In addition, climate action issues can be mainstreamed into other TOs. Hence, ESIF can significantly contribute to the achievement of the climate objectives and the transition to a low-carbon and climate resilient economy.

The European Social Fund (ESF) will make an important contribution to the transition to a low-carbon and climate-resilient Europe.

This Fact Sheet shows how this can be done and outlines the potential for climate mainstreaming in this fund.

The ESF is one of the five European Structural and Investment Funds (ESIF) under the Common Provisions Regulation (CPR). These funds have a key role to play in achieving the Europe 2020 Strategy for smart, sustainable and inclusive growth. The five funds will contribute to the target that climate-related expenditure will represent at least 20 % of EU spending in the period 2014-20, while helping to improve energy security, build a low-carbon, resource-efficient and climate resilient economy that will boost Europe's competitiveness and create more and greener jobs.

The CPR defines eleven Thematic Objectives that will contribute to the implementation of the Europe 2020 Strategy. The ESF covers Thematic Objective 8, 9, 10 and 11. There is great potential for mainstreaming climate action into support from the ESF to these Thematic Objectives. By doing so, the ESF can contribute towards reaching at least 20 % climate-related expenditure out of the overall EU budget.

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#### Further information

DG Climate Action:  
<http://ec.europa.eu/clima>

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